

Reference: 111114ZI Technical Data Sheet

Product: **Tryptic Soy Agar (TSA) Irradiated - Double wrapping**



Specification

General purpose solid medium containing animal and plant peptone according to Pharmacopoeial Harmonised Method and ISO Standards.

Presentation

	Packaging Details	Shelf Life	Storage
20 Plates /Irradiated 90 mm - Double wrapping with: 21 ± 2 ml	1 box with 2 cellophane bags (double wrapping) with 10 plates/bag. Side labeling. Every pack exhibits a irradiation indicator stacked on the side of the bag.(8 -14kGy).	3,5 months	2-14 °C

Composition

Composition (g/l):	
Peptone from casein	15.00
Soya peptone.....	5.00
Sodium chloride.....	5.00
Agar.....	15.00

Description /Technique

Description

TSA is a widely used medium containing two peptones which support the growth of a wide variety of organisms, even that of very fastidious ones such as Neisseria, Listeria, Brucella, etc. It is frequently used for routine diagnostic purposes due to its reliability and its easily reproducible results.

Technique

This medium can be inoculated directly or after enrichment broth.

Spread the plates by streaking methodology or by spiral method.

The inoculated plates are incubated at 30-35 ° C for 24-72 h (bacteria) and 3-5 days for fungi (yeast & molds). Examined daily (Incubation times greater then those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications).

Each laboratory must evaluate the results according to their specifications.

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Quality control
Physical/Chemical control

Color : Straw-coloured yellow pH: 7.3 ± 0.2 at 25°C

Microbiological control

Growth Promotion Test 50-100 CFU according to harmonized Pharmacopoeia monographs (EP) and test methods & ISO 11133:2014/A1:2018
 Spiral Spreading: Practical range 50 - 100 CFU (productivity).

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Aerobiosis. Incubation at 30-35-37 °C. Read after 18-24 h to 72 h for bacteria and 3-5 days for fungi.

Microorganism

Escherichia coli ATCC® 8739, WDCM 00012
Staphylococcus aureus ATCC® 6538, WDCM 00032
Bacillus subtilis ATCC® 6633, WDCM 00003
Candida albicans ATCC® 10231, WDCM 00054
Ps. aeruginosa ATCC® 9027, WDCM 00026
Salmonella typhimurium ATCC® 14028, WDCM 00031
Aspergillus brasiliensis ATCC® 16404, WDCM 00053
L. monocytogenes ATCC® 13932, WDCM 00021
Bacillus cereus ATCC® 11778, WDCM 00001
Enterococcus faecalis ATCC® 29212, WDCM 00087
Clostridium perfringens ATCC® 13124, WDCM 00007, NCTC® 8237
Clostridium sporogenes ATCC® 19404, WDCM 00008
Stph. aureus ATCC® 25923, WDCM 00034
Escherichia coli ATCC® 11775, WDCM 00090

Growth

Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)
 Good (≥70%)

Sterility Control

Incubation 48 h at 30-35 °C and 48 h at 20-25 °C: NO GROWTH.
 Check at 7 days after incubation in same conditions.

Bibliography

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- ISO 21149 Standard (2017) Cosmetics - Microbiology - Enumeration and detection of aerobic mesophilic bacteria.
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Storage

Storage conditions: 2-14°C

Alternatively the plates may also be stored at the range of 2 - 25°C, with a proper performance of the medium, but some precautions must be taken into account:

- In the range of 2 - 8 °C avoid direct contact with surfaces that can freeze product.
- In the range of 15 - 25 °C, dehydration control must be taking in account.